

# Sawflies (Hymenoptera: Symphyta) from Szeged and its surroundings (SE Hungary)

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GYURKOVICS, H. & HARIS, A.: *Sawflies (Hymenoptera: Symphyta) from Szeged and its surroundings (SE Hungary)*.

**Abstract:** 101 sawfly species are reported from Szeged, Bácsborista and Ásotthalom. *Acantholyda (Acantholyda) flaviceps* (Retzius, 1783) is new record for Hungary. Rare species are: *Xyela menelaus* Benson, 1960, *Xyela nigroabscondita* Haris and Gyurkovics, 2011, *Tremex alchymista* Mocsáry, 1886, *Arge beckeri* (Tournier, 1889), *Arge frivaldszkyi* (Fischbein, 1852), *Cephus runcator* (Konow, 1896), *Cephus infuscatus* (C. G. Thomson, 1871), *Cephalcia arvensis* Panzer, 1804, *Dolerus quadrinotatus* (Biró, 1884), *Dolerus stygius* (Forster, 1860), *Athalia rufoscutellata* Mocsáry, 1879, *Macrophyia teutona* (Linnaeus, 1767), *Rhogogaster chambersi* (Benson, 1947), *Rhogogaster genistae* (Benson, 1947) and *Pachynematus moerens* Förster, 1854.

**Keywords:** Hymenoptera, Symphyta, Szeged, Hungary, new record

## Introduction

Szeged is situated near the southern border of Hungary, in the Southern Hungarian Great Plain on both banks of the River Theis (River Tisza), 169 km South-East of Budapest. Szeged's climate is transitional between oceanic and continental with cold winters, hot summers, and low precipitation. The yearly mean temperature is 11.2 °C, higher than that of Hungary (10 °C). The yearly mean moisture is only 520 mm. The altitude is at Szeged between 77-80 m and at Ásotthalom 108-116 m above the sea level.

Szeged and its area have been inhabited since the Neolitics (5000 B. Ch.). Ptolemaeus (Ptolemy) mentions the oldest known name of the city: Partiscum. The present name of the city was first mentioned in 1183. For now, it is the 3rd largest city of Hungary with a population of 170 000 people.

The sawfly fauna of Szeged and its environment is hardly known and only a limited number of investigations were carried out in this area. The first checklist of sawflies was published by Vellay (1899). This list contains 37 species, namely *Arge enodis* (Linnaeus, 1767), *Arge ochropus* (Gmelin, 1790), *Abia sericea* (Linnaeus, 1758), *Cimbex femoratus* (Linnaeus, 1758), *Cimbex luteus* (Linnaeus, 1758), *Cimbex quadrimaculatus* (O.F. Müller, 1766), *Acantholyda posticalis pinivora* Enslin, 1918, *Dolerus anticus* (Klug, 1818), *Dolerus gonager* (Fabricius, 1781), *Dolerus haematodes* (Schrank, 1781), *Dolerus niger* (Linnaeus, 1767), *Allantus cinctus* (Linnaeus, 1758), *Allantus didymus* (Klug, 1818), *Athalia glabricollis* C. G. Thomson, 1870, *Athalia rosae* (Linnaeus, 1758),

*Taxonus agrorum* (Fallén, 1808), *Blennocampa phyllocolpa* Viitasaari et Vikberg, 1985, *Eutomostethus ephippium* (Panzer, 1798), *Monophadnus pallescens* (Gmelin, 1790), *Macrophyia postica* Brullé, 1832, *Macrophyia punctumalbum* (Linnaeus, 1767), *Macrophyia rufipes* (Linnaeus, 1758), *Rhogogaster viridis* (Linnaeus, 1758), *Sciapteryx costalis* (Fabricius, 1775), *Tenthredo bifasciata* ssp. *rossii* (Panzer, 1804), *Tenthredo costata* (Klug, 1817), *Tenthredo excellens* (Konow, 1886), *Tenthredo flaveola* (Gmelin, 1790), *Cladius pectinicornis* (Geoffroy, 1785), *Nematus bergmanni* Dahlbom, 1835, *Nematus miliaris* (Panzer, 1797), *Nematus myosotidis* (Fabricius, 1804), *Nematus tibialis* Newman, 1837, *Calameuta haemorrhoidalis* (Fabricius, 1781), *Cephus pygmaeus* (Linnaeus, 1767), *Urocerus gigas* (Linnaeus, 1758) and *Xiphydria prolongata* (Geoffroy, 1785) (VELLAY 1899).

His sawfly list was included in MOCsÁRY (1900) and he added the following species: *Pamphilus sylvaticus* (Linnaeus, 1758), *Dolerus blanki* Liston, 1995: Szeged: Fehértó, *Aneugmenus padi* (Linnaeus, 1761), *Selandria serva* (Fabricius, 1793), *Allantus calceatus* (Klug, 1818), *Macrophyia albicincta* (Schrank, 1776), *Macrophyia chrysura* (Klug, 1817), *Macrophyia crassula* (Klug, 1817), *Tenthredo scrophulariae* Linnaeus, 1758, *Tenthredopsis hungarica* (Klug, 1817), *Tenthredopsis lactiflua* (Klug, 1817), *Trichiocampus grandis* (Serville, 1823), *Calameuta filiformis* (Eversmann, 1847), *Xiphydria camelus* (Linnaeus, 1758).

In 1962, Béla Ambrus recorded some Symphyta galls from the area of river Theis (Tisza) at Szeged (AMBRUS 1962), 2 species, namely *Blennocampa phyllocolpa* Viitasaari et Vikberg, 1985 and *Pontania viminalis* (Linnaeus, 1758).

Additional, new sawfly records are available in ROLLER and HARIS (2008): *Pamphilus betulae* (Linnaeus, 1758), *Dolerus nigratus* (O.F. Müller, 1776), *Dolerus puncticollis* C. G. Thomson, 1871, *Athalia cordata* Serville, 1823 and *Stethomosthus funereus* (Klug, 1816).

Finally, 3 more species were recorded by Haris, Nagy, Móczár and Zombori: *Hoplocampa brevis* (Klug, 1816) (Nagy, 1994), *Pikonema pallescens* (Hartig, 1837) (Haris, 2001) and *Sirex juvencus* (Linnaeus, 1758) (MÓCZÁR and ZOMBORI 1973).

## Method and material

For identification Zhelochovtsev's work on the sawflies of the European part of the former USSR (ZHELOCHOVTSEV 1988) was consulted, together with the Fauna Hungariae series (MÓCZÁR and ZOMBORI 1973, ZOMBORI 1982, 1990). We also used some recent revisions to make the identifications even more precise (BLANK and RITZAU 1998, HARIS 2006 and KOCH 1988).

For the discussion of the distribution of sawflies, we consulted the book of Roller and Haris titled Sawflies of the Carpathian Basin, History and Current Research (ROLLER and HARIS 2008) and also the most recent European checklist of species (TAEGER et al., 2006). The higher classification of sawflies applied follows the Hymenoptera part of Fauna Europaea (ACTHENBERG 2004). Our references for biological data of sawflies are SCHEDL (1991), TAEGER et. al. 1998, and LISTON 1995.

### **Localities:**

Ásotthalom: a region immediately E of Kiss Ferenc Memorial Woods on both sides of a dirt road, running roughly in a NW – SE direction, with patches of open and closed sand-dune vegetations, surrounded by deciduous and pine wood plantations, between co-ordinates N46°12'56.62", E19°47'38.38" and N46°13'15.81", E19°47'31.27".

Bácsborista, sand dune (homokdomb): a sand dune with relatively steep slopes covered by very spars vegetation. It is surrounded by Scotch pine, black pine, and white poplar plantations. Its co-ordinates are N46°13'43.55", E19°39'17.10"

Bácsborista: pasture (legelő): a sandy pasture-land with a vegetation typical of the Danube – Tisza interfluves, here and there with disturbed spots covered by ruderal vegetation, lying SE of the small Bácsborista settlement. It is surrounded on three sides by plantations of deciduous and pine woods, and by arable lands on its NE side. It stretches in a NW-SE direction between co-ordinates N46°13'50.01", E19°39'46.78" and N46°13'23.72", E19°40'40.08".

Kelebia: fishing ponds (Kelebiai halastavak): the eastern edge of the northernmost member of a series of artificial fishing ponds near Kelebia. The pond is unused now and is covered by reed, flag, *Carex* and *Cyperus*. Its margin gradually turns into a sandy pasture. Co-ordinates: N46°13'10.83", E19°37'4.23"

Mórahalom, Csipaksemlyék: a shallow depression between low, consolidated sand-dunes, which harbors a drying-out bog with a species-rich vegetation that includes several species of orchids and irises. It is spread around co-ordinates N46°11'2.55", E19°54'3.53"

Szeged, Maros töltés: both sides of the dam on the left bank of river Maros from the confluence with river Tisza to about 2000 m upriver, including the edge of the softwood gallery forest on its north, and the area stretching along it on its southern side, until the stripe of cultivated arable land that follows the course of the dam. The southern slope of the dam is regularly mown and is covered by open grass and some weed, while the northern slope is covered by closed grass that molds into a wetland type of vegetation near the softwood gallery forest. The area stretches between co-ordinates N46°15'2.35", E20°11'27.54" and N46°14'24.42", E20°12'56.68".

Szeged, Óthalom: a hill of loessic silt used traditionally for extracting earth for refilling purposes, now a mosaic of freshly opened and old pits, the deeper parts of which are overgrown with reed or by deciduous woods, while higher grounds are covered by drought-tolerant weeds and grasses. Co-ordinates: N46°17'12.48", E20°6'18.47"

Szeged: Újszeged, Erzsébet liget, (formerly Népliget): it is a city park near the left bank of river Tisza, planted over about 160 years. A broad stripe on both sides of the central walk is under more or less constant gardening, while the remaining parts on either side are mostly undisturbed woodlands. Co-ordinates: N46°14'53.22", E20°9'45.03"

Szeged: Újszeged, the levee at the end-point of Légió utca (= Légió street): a stretch of about 500 m of an old flood bank between co-ordinates N46°12'3.69", E20°9'7.87" and N46°12'43.74", E20°9'32.28". It is covered by closed grass mixed with weeds.

Szeged: Újszeged, railway station (vasútállomás): the environs of the railway station (the final stop of the Makó – Szeged line), roughly between the end-point of Gyimesi street and the UTC Sporting Ground. Most of it is unused land, which was several decades ago a place of a demolished factory, now spontaneously overgrown by sapwoods of mixed deciduous trees, ruderal vegetation and weeds; other parts are planted over by different deciduous tree species. It stretches between co-ordinates N46°14'34.41", E20°9'38.54" and N46°14'17.00", E20°9'33.98"

Szeged: Újszeged, vasúti töltés: the old railway embankment between co-ordinates N46°13'31.91", E20°10'31.22" and N46°13'20.97", E20°10'36.59", covered by grass and weeds with sporadic bushes of *Prunus spinosa*, *Rosa* sp. and *Crataegus* on its western slope, and with a denser cover of these bushes interspersed with planted oak trees on its eastern side.

Szeged, Tisza part: the northernmost tip of the softwood gallery forest covering "Boszorkánysziget" ("Witch's island"), near the city centre. Only a single specimen of *Rhogogaster chlorosoma* was collected here. Its co-ordinates are: N46°14'37.83", E20°8'59.18"

Szeged: Újszeged, "Kamaratöltés" (the levee at the end-point of Légió street): a stretch of about 500 m of an old flood bank between co-ordinates N46°12' 3.69", E20°9' 7.87" and N46°12'43.74", E20°9'32.28". It is covered by closed grass mixed with weeds.

Szeged, Vértói út (Vértói road): a small patch of weedy grass with sporadic *Eleagnus* bushes on the western side of the Vértói Street at co-ordinates N46°16'36.18", E20°8'13.82"

## List of sawflies

### Xyelidae

*Xyela (Xyela) menelaus* Benson, 1960: Szeged: Újszeged: Népliget, 05-10- 04. 2009, 2 females, 1 male. Locally frequent, mediterranean species. Hostplant: *Pinus nigra* (BLANK 2002).

*Xyela (Xyela) curva* Benson, 1938: Szeged: Újszeged: Népliget, 31. 03. 2011, 3 females, 1 male, 14. 04. 2009, 1 male. Locally frequent. Hostplant: *Pinus nigra* (BLANK 2002).

*Xyela nigroabscondita* Haris and Gyurkovics, 2011: Szeged: Újszeged: Népliget, 14. 03. 2011, 2 females, 15. 03. 2011, 1 female, 1 male. Rare, recently described species, known only from Hungary. Hostplant: *Pinus nigra* (HARIS and GYURKOVICS 2011).

### Siricidae

*Tremex alchymista* Mocsáry, 1886: Ásotthalom, 15. 05. 2011, 1 female. Sporadic with small distribution area. Hostplants: *Quercus*, *Acer*, *Betula*, *Populus* and *Ulmus* spp.

### Xyphidiidae

*Xiphydria prolongata* (Geoffroy, 1785): Szeged: Újszeged, Maros töltés, 26. 06. 2012, 1 female. Sporadic. Females live in symbiosis with fungus species, dominantly with *Daldinia childiae*. Hostplants: *Platanus*, *Populus*, *Alnus*, *Acer*, *Betula*, *Quercus*, *Salix*, *Ulmus* spp. and *Salix caprea*.

### Cephidae

*Calameuta (Calameuta) filiformis* (Eversmann, 1847): Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 male, 09. 05. 2012, 1 male, 04. 05. 2012, 1 female, 18. 05. 2012, 1 male, 26. 05. 2012, 1 male, 08. 06. 2012, 2 females, Szeged: Újszeged, railway station, 11. 05. 2012, 1 female, Szeged, Vértói út, 20. 05. 2012, 1 female. Common species. Larva lives in stems of *Arrhenaterum elatius*, *Phalaris arundinacea*, *Calamagrostis epigejos*, *Elytrigia repens* and *Phragmites communis*.

*Calameuta (Calameuta) haemorrhoidalis* (Fabricius, 1781): Bácsborista: pasture, 01-05. 05. 2011, 1 female, Mórahalom, Csipaksemetryék, 06. 05. 2012, 1 male, Újszeged, Maros töltés, 01. 05. 2012, 1 male, Szeged: Újszeged, railway station, 11. 05. 2012, 1 female. Frequent species. Hostplant unknown.

*Calameuta pallipes* (Klug, 1803): Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 male, Szeged: Újszeged, railway station, 27. 04. 2012, 2 males, 1 female. Frequent species. Hostplants: diverse Poaceae.

*Calameuta (Calameuta) punctata* (Klug, 1803): Szeged: Újszeged, Légió utca, 08. 04. 2012, 2 males, 7 females, 20. 04. 2012, 1 male, 3 females, Szeged: Újszeged, Maros töltés, 05. 04. 2012, 1 male, Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 female. Sporadic in Hungary.



Fig. 1: *Xyela menelaus* Benson, 1943



Fig. 2: *Tremex alchymista* Mocsáry, 1886



Fig. 3: *Acantholyda flaviceps* (Retzius, 1783)



Fig. 4: *Cephus infuscatus* (C. G. Thomson, 1871)

*Cephus brachycerus* (C. G. Thomson, 1871): Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 male. Widely distributed, sporadic species. Hostplant unknown.

*Cephus infuscatus* (C. G. Thomson, 1871): Szeged, Tisza töltés, 04. 06. 2012, 1 male, Szeged: Újszeged, railway station, 04. 06. 2012, 1 female, Szeged, Vértói út, 25. 05. 2012, 1 female. Rare species in the Carpathian Basin, we have only a few records from Hungary, Transylvania and Slovakia.

*Cephus nigrinus* Thomson, 1871: Szeged, Öthalom, 30. 04. 2012, 1 female, Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 male, Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 male. Frequent species. Hostplants: *Milium effusum* and *Poa pratensis*.

*Cephus pygmaeus* (Linnaeus, 1767): Szeged: Újszeged, railway station, 14. 05. 2011, 1 female, Szeged: Újszeged, Maros töltés, 28. 04. 2012, 1 female, 2 males, Szeged: Újszeged, railway station, 27. 04. 2012, 1 male, 31. 04. 2012, 2 males, 11. 05. 2012, 1 female, Szeged: Újszeged, old railway embankment, 5 females. Common. Insect pest of cereals and *Graminae*.

*Cephus runcator* (Konow, 1896): Szeged: Újszeged, Maros töltés, 26. 05. 2012, 2 females. Rare. Restricted to Hungary and North-East Croatia in the Carpathian Basin.

*Cephus spinipes* (Panzer 1800): Szeged: Újszeged, Légió utca, 20. 04. 2012, 1 male, Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 female, 28. 04. 2012, 1 male, Szeged: Újszeged, railway station, 26. 04. 2012, 1 female, Mórahalom, Csipaksemlényék, 26. 05. 2012, 1 female. Frequent species. Known hostplant: *Phleum pratense*.

### Argidae

*Aproceros leucopoda* (Takeuchi, 1939): Mórahalom, Csipaksemlényék, 26. 05. 2012, 1 female. Larva on *Ulmus* spp. Recently invaded Europe, known from Hungary, Poland, Slovakia, Austria, Romania, Ukraine and the Russian Far East (BLANK et al. 2010, CSÓKA et al. 2010).

*Arge beckeri* (Tournier, 1889): Bácsborista, pasture, 20. 05. 2012, 1 female, Mórahalom, Csipaksemlényék, 20. 05. 2012, 1 female. Szeged, Vértói út, 20. 05. 2012, 1 female. Rare species. Larvae found on *Euphorbia* spp.

*Arge berberidis* (Schrank, 1802): Bácsborista, sand dune, 29. 04. 2012, 1 male, Szeged: Újszeged, old railway embankment, 20. 04. 2012, 1 female. Locally frequent. Larva on *Berberis* and *Mahonia* spp.

*Arge cyanocrocea* (Förster, 1771): Szeged, Öthalom, 30. 04. 2012, 1 male, Szeged: Újszeged, Maros töltés, 18. 05. 2012, 1 female. Common species. Known hostplants: *Rubus idaeus* and *Sanguisorba officinalis*.

*Arge enodis* (Linnaeus, 1767): Szeged, Maros töltés, 28. 07. 2011, 1 female, 14. 08. 2011, 1 male. Common. Hostplants: *Salix* spp.

*Arge nigripes* (Retzius, 1783): Szeged: Újszeged, railway station, 06. 08. 2011, 1 male. Sporadic. Hostplants: *Rosa* spp.

*Arge frivaldszkyi* (Tischbein, 1852): Bácsborista: pasture, 01-05. 05. 2011, 1 male. Rare. Hostplant unknown.

*Arge melanochroa* (Gmelin, 1790): Ásotthalom, 25. 07. 2011, 2 females, 1 male, Bácsborista, pasture, 07. 05. 2012, 1 male, 20. 05. 2012, 1 male, 27. 05. 2012, 1 male, Mórahalom, Csipaksemlényék, 30. 05. 2012, 1 female, Szeged, Vértói út, 20. 05. 2012, 1 male. Common species. Hostplant: *Crataegus oxyacantha*.

*Arge ochropus* (Gmelin, 1790): Szeged, Öthalom, 31. 04. 2012, 1 male, 1 female, 30. 04. 2012, 1 female, Szeged: Újszeged, Maros töltés, 01. 05. 2012, 1 female, 06. 05. 2012, 2 females, Szeged: Újszeged, railway station, 16. 07. 2011, 1 female, 02. 08. 2011, 2 females, 06. 08. 2011, 1 male. Pest of *Rosa* spp. Frequent.

*Arge pagana pagana* (Panzer, 1798): Szeged: Újszeged, railway station, 24. 04. 2011, 1 female. Frequent. Hostplants: *Rosa* spp.

*Sterictiphora angelicae* (Panzer, 1799): Szeged: Újszeged, railway station, 03. 07. 2011, 2 males, 04. 06. 2012, 1 female, Szeged, Maros töltés, 04. 08. 2011, 1 female, 06.08. 2011, 1 female, 08. 06. 2012, 1 male, Mórahalom, Csipaksemlyék, 12. 05. 2012, 1 female. Frequent species. Hostplant unknown.

### Pamphiliidae

*Acantholyda (Acantholyda) flaviceps* (Retzius, 1783): Bácsborista, sand dune 10. 04. 2010, 1 female. New record for Hungary. Hostplant: *Pinus* spp.

*Acantholyda posticalis* (Matsumura, 1912): Bácsborista, sand dune, 15. 04. 2012, 2 male, 3 females, 29. 04. 2012, 1 male. Sporadic in Hungary. Insect pest in forestry. Hostplants: *Pinus* spp. such as *Pinus sylvestris*, *Pinus nigra*, *Pinus strobus*, *Pinus tabulaeformis*, *Pinus densiflora*, *Pinus armandi*, *Pinus thunbergii*, *Pinus bungeana*, *Cedrus deodara* and *Platycladus orientalis* are alternative hosts (ZANG 2004).

*Neurotoma nemoralis* (Linné, 1758): Ásotthalom, 25. 04. 2011, 1 female, Bácsborista, sand dune, 15. 04. 2012, 1 male, 2 females, 29. 04. 2012, 1 female. Known hostplants: *Prunus mahaleb*, *P. armeniaca*, *P. spinosa* and *P. cerasus*. Locally frequent pest.

*Cephalcia arvensis* Panzer, 1804: Bácsborista: pasture, 15-21. 04. 2011, 2 females, 2 males, Szeged: Újszeged, railway station, 15-25. 04. 2011, 1 female. Rare in Hungary. Hostplant: *Picea* spp.

*Pamphilus sylvaticus* (Linnaeus, 1758): Szeged: Öthalom, 10-15. 04. 2011, 1 male, 31. 04. 2012, 2 females, Szeged: Újszeged, railway station, 23. 04. 2012, 1 female. One of the commonest sawfly species. Hostplants: *Sorbus aucupariae*, *Malus* spp., *Prunus* spp. and *Crataegus* spp.

### Megalodontesidae

*Megalodontes fabricii* (Leach, 1817): Szeged: Öthalom, 10. 06. 2012, 1 female. Sporadic in Hungary. Hostplant unknown.

### Cimbicidae

*Abia sericea* (Linné, 1767): Szeged: Újszeged, railway station, 01. 08. 2011, 1 female, Szeged, Maros töltés, 14. 08. 2011, 1 male, Szeged: Újszeged, Maros töltés, 28. 04. 2012, 1 female. Sporadic. Hostplants: *Succisa*, *Knautia* and *Fragaria* spp.

### Tenthredinidae

#### Dolerinae

*Dolerus (Achetoprion) ferrugatus* (Serville, 1823): Mórahalom, Csipaksemlyék, 15. 04. 2012, 1 male, Szeged: Újszeged, Maros töltés, 04. 05. 2012, 1 female. Sporadic. Larva on *Juncus effusus*.

*Dolerus (Achetoprion) triplicatus* (Klug, 1818): Kelebia: fishing ponds, 15. 04. 2012, 1 male, 1 female. Sporadic. Larva on *Juncus filiformis* and *Juncus effusus*.

*Dolerus (Dolerus) bajulus* (Serville, 1823): Szeged: Maros töltés, 28. 07. 2011, 1 female, 20. 08. 2011, 1 male. Frequent. Hostplants: *Equisetum* spp.

*Dolerus (Dolerus) germanicus* (Fabricius, 1775): Mórahalom, Csipaksemlyék, 30. 06. 2012, 1 female. Common. Larva on *Equisetum arvense* and *E. palustre*.

*Dolerus (Poodolerus) asper* Zaddach, 1859: Bácsborista: pasture, 15-21. 04. 2011, 1 female, Szeged: Újszeged, Maros töltés, 05. 04. 2012, 1 female. Sporadic. Hostplants: *Graminae* and *Cyperaceae*.

*Dolerus (Poodolerus) gonager* (Fabricius, 1781): Szeged: Újszeged, Maros töltés, 05. 04. 2012, 7 males, 1 female, 06. 04. 2012, 2 males, 5 females, Szeged: Újszeged, railway station, 09. 04. 2012, 6 males, 1 female, 15-25. 04. 2011, 2 females, 13. 04. 2012, 1 male. Common. Larva on *Graminae*.

*Dolerus (Poodolerus) haematodes* (Schrank, 1781): Mórahalom, Csipaksemlyék, 25. 03. 2012, 1 male. Periodically common insect pest, otherwise sporadic. Larva on *Graminae*.

*Dolerus (Poodolerus) niger* (Linnaeus, 1781): Mórahalom, Csipaksemlyék, 01. 04. 2012, 1 female. Sporadic. Larva on *Graminae*, probably on *Juncus*.

*Dolerus (Poodolerus) migratus* (O. F. Müller, 1776): Bácsborista: pasture, 15-21. 04. 2011, 1 female, Bácsborista: pasture 01-05. 05. 2011, 1 female, Szeged: Újszeged, railway station, 03. 04. 2012, 2 females, 09. 04. 2012, 2 males, Szeged: Újszeged, Légió utca, 19. 04. 2012, 4 males, 2 females, 20. 04. 2012, 3 females, Szeged: Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 female, 20. 04. 2012, 1 female. Common. Larva on *Graminae* including cereals.

*Dolerus (Poodolerus) picipes* (Klug, 1818): Kelebia: fishing ponds, 15. 04. 2012, 2 males, 5 females, 22. 04. 2012, 1 female, Szeged: Újszeged, railway station, 09. 04. 2012, 1 female, 15-25. 04. 2011, 2 females. Frequent. Larva on *Graminae*.

*Dolerus (Poodolerus) puncticollis* (C. G. Thomson, 1871): Kelebia: fishing ponds, 15. 04. 2012, 1 female, Szeged: Újszeged, Légió utca, 08. 04. 2012, 6 females, 19. 04. 2012, 1 female, Szeged: Újszeged, Maros töltés, 23. 03. 2012, 3 females, 05. 04. 2012, 1 female, 06. 04. 2012, 1 female, Szeged: Újszeged, railway station, 15-25. 04. 2011, 7 females, 1 male, 03. 04. 2012, 1 female, 11. 04. 2012, 1 female. Common. Larva on *Graminae* including cereals.

*Dolerus (Poodolerus) quadrinotatus* (Biró, 1884): Szeged: Újszeged, Légió utca, 08. 04. 2012, 1 female, 19. 04. 2012, 2 females, 20. 04. 2012, 1 female. Rare. Hostplant unknown.

*Dolerus (Poodolerus) stygius* (Forster, 1860): Kelebia: fishing ponds, 15. 04. 2012, 1 female. Rare. Hostplant unknown.

### Selandriinae

*Selandria serva* (Fabricius, 1793): Mórahalom, Csipaksemlyék, 12. 05. 2012, 1 female. Frequent. Hostplants: grasses, sedges, rushes.

### Allantinae

*Allantus (Emphytus) calceatus* (Klug, 1814): Mórahalom, Csipaksemlyék, 26. 05. 2012, 1 male. Frequent. Larva on *Filipendula ulmaria*, *Fragaria vesca*, *Rosa canina*, *Spiraea palmata*, *Alchemilla vulgaris*, *Rubus fruticosus* and *Sanguisorba officinalis*.

*Allantus (Emphytus) cinctus* (Linnaeus, 1758): Szeged, Maros töltés, 12. 08. 2011, 1 female, Szeged: Újszeged, railway station, 24. 04. 2012. Frequent. Hostplants: *Rosa* spp.

*Allantus (Emphytus) cingulatus* (Scopoli, 1763): Ásotthalom, 24. 04. 2011, 1 female, Szeged: Újszeged, railway station, 24. 04. 2012, 2 males, 26. 04. 2012, 1 female. Frequent. Larva on *Fragaria* and *Rosa* spp.

*Allantus didimus* (Klug, 1818): Szeged: Újszeged, Maros töltés, 04. 05. 2012, 1 male, Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 male, Szeged: Újszeged, railway station, 11. 05. 2012, 1 female. Frequent. Larva on *Rosa* spp.

*Allantus (Emphytus) melanarius* (Klug, 1818): Újszeged, railway station, 01.05. 2012, 1 male. Frequent. Hostplant: *Cornus sanguinea*.

*Ametastegia (Ametastegia) glabrata* (Fallén, 1808): Kelebia: fishing ponds, 22. 04. 2012, 1 male, Szeged: Újszeged, Maros töltés, 18. 05. 2012, 1 male, Szeged: Öthalom, 07. 07. 2011, 1 female. Frequent polyphagous species. Hostplants: *Chenopodiaceae*, *Polygoniaceae*, *Plantago*, *Salix*, *Lythrum*, *Solanum*, *Ribes* and *Rubus* spp. Also introduced to South America and Australia.

*Athalia ancilla* ssp. *ancilla* Serville, 1823 (syn. *Athalia glabricollis* Thomson, 1870): Szeged: Újszeged, Maros töltés, 12. 08. 2012, 1 female. Frequent. Hostplants: *Diplotaxis tenuifolia*, *Erysimum cheiranthoides*, *Sinapis alba*, *Sisymbrium officinale*, *Raphanus raphanistrum*, *Brassica nigra* and *Alliaria petiolata*.

*Athalia bicolor* (Serville, 1823): Mórahalom, Csipaksemlyék, 30. 05. 2012, 1 male, Szeged: Újszeged, Maros töltés, 28. 04. 2012, 2 females, 2 males, 01. 05. 2012, 2 males, 09. 05. 2012, 1 female, 18. 05. 2012, 2 males, 1 female, Szeged, Öthalom, 31. 04. 2012, 2 males, 1 female, Szeged: Újszeged, old railway embankment, 03. 05. 2012, 1 female. Frequent. Hostplant: *Ranunculus* spp.

*Athalia cordata* (Serville, 1823): Szeged: Újszeged, railway station, 15-25. 04. 2011, 1 female, 23. 04. 2012, 1 male, Szeged: Öthalom, 10-15. 04. 2011, 1 female, 1 male, Szeged: Újszeged, Népliget, 26. 04. 2012, 1 female, Bácsborista: pasture 01-05. 05. 2011, 1 male. Common. Larva on *Misopates orontinum*, *Antirrhinum majus*, *Ajuga reptans*, *Teucrium scorodonia* and *Plantago* spp.

*Athalia rosae* (Linné, 1758): Szeged: Újszeged, railway station, 24. 04. 2011, 1 male, 2 females, 19. 07. 2011, 1 female, 01. 08. 2011, 1 female, Bácsborista: pasture 01-05. 05. 2011, 1 female, Szeged, Maros töltés, 03. 08. 2011, 1 female, 28. 04. 2012, 1 male, 18. 05. 2012, 1 female, 25. 05. 2012, 1 male, 1 female. Common insect pest. Hostplants: *Raphanus sativus*, *R. raphanistrum*, *Sinapis arvensis*, *Sisymbrium officinale*, *Armoracia rusticana*, *Barbarea* sp., *Brassica napus*, *B. juncea*, *B. rapa*, *B. oleracea*, *Tropaeolum majus*, *Sinapis arvensis*, *Alliaria petiolata* and *Cardamine* spp.

*Athalia rufoscutellata* (Mocsáry, 1879): Ásotthalom, 24. 04. 2011, 1 female. Rare in Hungary. Hostplant unknown.

*Monostegia abdominalis* (Fabricius, 1798): Mórahalom, Csipaksemlyék, 12. 05. 2012, 1 female. Sporadic. Recorded on *Glaux maritima*, *Lysimachia numularia* and *L. vulgaris*.

*Taxonus agrorum* (Fallén, 1808): Szeged: Újszeged, Maros töltés, 06. 05. 2012, 1 male. Frequent. Hostplant: *Rubus idaeus*.

### Blennocampinae

*Blennocampa phyllocolpa* Viitasaari & Vikberg, 1985 (= *Blennocampa pusilla* (Klug, 1816)): Szeged: Újszeged, railway station, 15-20. 04. 2011, 1 female, 23. 04. 2012, 4 males, 26. 04. 2012, 2 females, 27. 04. 2012, 1 female, 28. 04. 2012, 2 females. Frequent. Larva rolls the leaves of *Rosa* spp.

*Claremontia puncticeps* (Konow, 1886): Szeged: Újszeged, railway station, 11. 04. 2012, 1 female. Relatively rare. Hostplant: *Sanguisorba minor*.

*Eutomostethus ephippium* (Panzer, 1798): Szeged: Újszeged, Maros töltés, 18. 05. 2012, 2 females. Generally common. Larva on *Gramineae*.

*Eutomostethus gagatinus* (Klug, 1814): Szeged: Újszeged, Maros töltés, 09. 05. 2012, 2 males. Sporadic. Hostplant unknown.

*Halidamia affinis* (Fallén, 1807): Szeged: Újszeged, railway station, 15-20. 04. 2011, 1 female 01. 05. 2012, 2 females. Frequent. Hostplants: *Galium aparine* and *G. molugo*.

*Monophadnus spinolae* (Klug, 1816): Ásotthalom, 24. 04. 2011, 1 male, Szeged: Újszeged, railway station, 15-20. 04. 2011, 3 males. Sporadic. Hostplants: *Clematis vitalba* and *C. flammula*.

*Monophadnoides ruficruris* (Brullé, 1832): Szeged: Újszeged, railway station, 09. 04. 2012, 1 male, 11. 04. 2012, 1 male, Szeged: Újszeged, old railway embankment, 19. 04. 2102, 1 female. Sporadic. Hostplant: *Rubus fructicosus*.

*Stethomostus fuliginosus* (Schrank, 1781): Kelebia: fishing ponds, 22. 04. 2012, 1 male, 1 female, Szeged: Újszeged, Maros töltés, 26. 05. 2012, 1 male. Frequent. Larva on *Ranunculus acris*, *R. repens* and *R. sceleratus*.

*Tomostethus nigritus* (Fabricius, 1804): Szeged: Újszeged, railway station, 24. 04. 2011, 1 female. Sporadic. Hostplant: *Fraxinus excelsior*.

#### Heterarthrinae

*Endelomyia aethiops* (Gmelin, 1790): Szeged: Újszeged, railway station, 23. 04. 2012, 2 females, 27. 04. 2012, 1 female. Relatively frequent. Larva on *Rosa* spp.

#### Tenthredininae

*Aglaostigma (Astochus) aucupariae* (Klug, 1817): Szeged: Öthalom, 10-15. 04. 2011, 3 males, 30. 04. 2012, 2 males, Szeged, Újszeged, Maros töltés, 01. 05. 2012, 1 female, Szeged: Újszeged, railway station, 25. 03. - 05. 04. 2011, 3 females, 11. 04. 2012, 1 male, 1 female, 13. 04. 2012, 2 females. Common. Larva on *Galium mollugo* and *G. boreale*.

*Macrophyia (Macrophyia) albicincta* (Schrank, 1776): Szeged: Újszeged, railway station, 06. 04. 2012, 1 male, 24. 04. 2011, 2 females, Szeged: Öthalom, 10-15. 04. 2011, 1 male, 30. 04. 2012, 3 females, Szeged: Újszeged, railway station, 25. 03. - 05. 04. 2011, 1 female, 1 male, Szeged: Újszeged, Népliget, 26. 04. 2012, 1 male. Common. Hostplants: *Sambucus ebulus*, *S. nigra*, *S. racemosa*, *Valeriana officinalis* and *Viburnum opulus*.

*Macrophyia (Macrophyia) doudecimpunctata* (Linnaeus, 1758): Bácsborista, pasture, 07. 05. 2012, 1 female. Frequent. Hostplants: *Graminae*, *Cyperaceae* and *Carex* spp.

*Macrophyia (Macrophyia) postica* (Brullé, 1832): Szeged: Újszeged, Maros töltés, 04. 05. 2012, 1 male, 06. 05. 2012, 1 female, 09. 05. 2012, 1 male, 2 females, 18. 05. 2012 1 males, 25. 05. 2012, 1 male, 1 female, Szeged: Újszeged, railway station, 04. 06. 2012, 1 male. Frequent. Hostplant unknown.

*Macrophyia (Macrophyia) rufipes* (Linnaeus, 1758): Mórahalom, Csipaksemléyék, 20. 05. 2012, 2 males, Szeged: Újszeged, Maros töltés, 04. 05. 2012, 1 female, 09. 05. 2012, 1 female, 18. 05. 2012, 1 female. Sporadic. Larva on *Agrimonia eupatoria* and *Vitis vinifera*.

*Macrophyia (Macrophyia) teutona* (Linnaeus, 1767): Ásotthalom, 12. 05. 2012, 1 female. Larva on *Euphorbia cyparissias*. Rare in Hungary.

*Rhogogaster (Cytisogaster) chambersi* (Benson, 1947): Mórahalom, Csipaksemléyék, 06. 05. 2012, 1 male. Rare in Hungary. Known hostplant: *Linum catharticum*.

*Rhogogaster (Cytisogaster) genistae* (Benson, 1947): Mórahalom, Csipaksemléyék, 12. 05. 2012, 1 female. Rare in the Carpathian Basin. Hostplants: *Sarothamnus scoparius*, *Lembotropis nigricans*, *Genista tinctoria*, *Genista germanica*.

*Rhogogaster (Rhogogaster) chlorosoma* (Benson, 1943): Szeged, Tisza töltés, 04. 06. 2012, 1 female. Frequent. Hostplants: *Pteridium aquilinum*, *Alnus glutinosa*, *Circaea*, *Prunus* spp., *Ranunculus* spp., *Rosa* spp., *Salix alba*, *S. purpurea*, *Stellaria* spp., *Filipendula ulmaria*, *Populus tremula*, *Padus* spp., *Betula* spp., *Corylus avellana* and *Sorbus* spp.

*Tenthredo (Cephaledo) costata* (Klug, 1817): Bácsborista, 19. 05. 2012, 1 male, 27. 05. 2012, 1 female, 29. 05. 2011, 1 female, Mórahalom, Csipaksemléyék, 12. 05. 2012, 1 male, 30. 05. 2012, 1 female. Sporadic in Hungary, more frequent in the Balkans. Hostplant unknonwn.

*Tenthredo (Elinora) bifasciata rossii* (Panzer, 1804): Mórahalom, Csipaksemlyék, 20. 05. 2012, 1 male, 26. 05. 2012, 1 female, Szeged: Újszeged, Maros töltés, 25. 05. 2012, 1 male, 1 female. Frequent. Hostplants: *Scrophularia* and *Verbascum* spp.

*Tenthredo (Elinora) dahlii* (Klug, 1817): Szeged, Öthalom, 04. 05. 2012, 1 male, Szeged: Újszeged, railway station, 11. 05. 2012, 1 female. Sporadic in the Carpathian Basin.

*Tenthredo (Elinora) flaveola* (Gmelin, 1790): Szeged: Újszeged, Maros töltés, 28. 04. 2012, 2 females, 4 males, 06. 05. 2012, 1 male, Szeged: Újszeged, old railway embankment, 03. 05. 2012, 1 male. Sporadic. Larva on *Isatis tinctoria*, *Brassica nigra*, *Brassica oleracea*, *Raphanus raphanistrum*, *Sinapis alba* and *Sinapis arvensis*.

*Tenthredo (Tenthredella) solitaria* (Scopoli, 1763): Mórahalom, Csipaksemlyék, 20. 05. 2012, Szeged, Öthalom, 30. 04. 2012, 1 male, 1 female, 31. 04. 2012, 1 male, 1 female, 04. 05. 2012, 1 male, Szeged: Újszeged, Maros töltés, 28. 04. 2012, 2 females, 06. 05. 2012, 2 males, 2 females, 18. 05. 2012, 1 male. Sporadic in Hungary. Larva on *Euphorbia cyparissias*.

*Tenthredo (Zonuledo) zonula* (Klug, 1814): Szeged, Öthalom, 30. 04. 2012, 2 females, Szeged: Újszeged, Maros töltés, 06. 05. 2012, 1 female, 18. 05. 2012, 1 male, Szeged: Újszeged, railway station, 14. 05. 2011, 1 female, Szeged: Újszeged, old railway embankment, 19. 04. 2012, 2 females, 03. 05. 2012, 3 males. Frequent. Hostplant: *Hypericum perforatum*.

*Tenthredopsis tessellata* (Klug, 1817): Ásotthalom, 24. 04. 2011, 1 female, 25. 04. 2011, 1 male, Kelebia: fishing ponds, 15. 04. 2012, 1 male, Szeged, Öthalom, 04. 05. 2012, 1 female, 30. 04. 2012, 1 female, 31. 04. 2012, 1 male, Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 male, 03. 05. 2012, 1 female. Sporadic. Larva on *Deschampsia*, *Dactylis*, *Aira* and *Lolium* spp.

### Nematinae

*Cladius (Cladius) pectinicornis* (Geoffroy, 1785): Szeged: Újszeged, old railway embankment, 19. 04. 2012, 1 male. Frequent. Larva on *Fragaria*, *Rosa*, *Filipendula* spp., *Poterium sanguisorba*, *Lamiastrum galeobdolon* and *Comarum palustre*.

*Hoplocampa crataegi* (Klug, 1816): Ásotthalom, 07. 05. 2011, 1 female. Frequent. Hostplants: *Crataegus* spp.

*Hoplocampa flava* (Linnaeus, 1761): Szeged: Újszeged, railway station, 03. 04. 2012, 1 female. Sporadic pest. Hostplants: *Prunus domestica* and *P. spinosa*.

*Hoplocampa fulvicornis* (Panzer, 1801): Szeged: Újszeged, railway station, 25. 03. - 05. 04. 2011, 1 male. Sporadic. Larva on *Prunus spinosa*.

*Nematus (Pteronidea) tibialis* Newman, 1837: Szeged: Újszeged, railway station, 15-20. 04. 2011, 1 female. 1 female, Szeged: Újszeged, railway station, 25. 03. - 05. 04. 2011, 2 females. Frequent. Larva on *Robinia pseudacacia*.

*Pachynematus (Polynematus) annulatus* (Gimmerthal, 1834): Szeged, Öthalom, 30. 04. 2012, 1 male, 3 females. Sporadic. Larva on *Rumex obtusifolius*.

*Pachynematus cliterratus* (Serville, 1823): Szeged: Újszeged, Légió utca, 19. 04. 2012, 1 female. Frequent. Larval hosts: *Poaceae*, *Carex* and *Juncus* spp.

*Pontania (Pontania) proxima* (Serville, 1823): Szeged: Újszeged, Maros töltés, 26. 06. 2012, 7 galls. Frequent, larva on *Salix fragilis* and *S. alba*.

*Pachynematus moerens* (Förster, 1854): Szeged: Újszeged, Légió utca, 08. 04. 2012, 8 males, 19. 04. 2012, 3 females, 20. 04. 2012, 5 females, Szeged: Újszeged, Maros töltés, 05. 04. 2012, 1 male, 1 female, Szeged: Újszeged, railway station, 11. 04. 2012, 1 female, 15-25. 04. 2011, 1 male. Rare. Larva on *Graminae*.



Fig. 5: *Cephus runcator* (Konow, 1896)



Fig. 6: *Arge beckeri* (Tournier, 1889)



Fig. 7: *Dolerus quadrinotatus* (Bíró, 1884)

*Pristiphora (Micronematus) monogyniae* (Hartig, 1840): Szeged: Öthalom, 10-15. 04. 2011, 1 male. Sporadic. Hostplant: *Prunus spinosa*, occasionally *P. domestica*.

*Pristiphora (Pristiphora) aphantoneura* (Förster, 1854): Szeged: Maros töltés, 04. 08. 2011, 1 female, 04. 08. 2011, 1 female. Sporadic. Larva on *Salix* spp.

*Pristiphora (Pristiphora) bifida* (Hellén, 1948): Szeged: Újszeged, railway station, 25. 06. 2011, 1 female. Sporadic. Larva on *Salix* spp.

*Pristiphora (Pristiphora) melanocarpa* (Hartig, 1840): Szeged: Újszeged, railway station, 27. 06. 2010, 1 female. Sporadic. Hostplants: *Salix caprea*, *Betula pendula*, *Salix cinerea*, *Salix fragilis*, *Salix pentandra* and *Salix viminalis*.

*Pristiphora (Pristiphora) pallidiventris* (Fallén, 1808): Tisza töltés, 28. 07. 2011, 1 female. Frequent. Larva on *Geum*, *Potentilla*, *Rubus* and *Filipendula* spp.

*Pristiphora (Pristiphora) appendiculata* (Hartig, 1837): Szeged: Öthalom, 10-15. 04. 2011, 1 female, Szeged: Újszeged, railway station, 15-20. 04. 2011, 1 female. Common. Hostplants: *Ribes uva-crispa* and *R. rubrum*.

The collected 101 species is a respectable number, especially if we consider that only 99 species were captured from the whole territory of the Hortobágy National Park (ZOMBORI 1981); furthermore, the Hungarian Great Plain (where Szeged and also Hortobágy are situated) holds low number of sawflies. It is very interesting that, in contrast to Hortobágy National Park, rare species constitute a high proportion of the collected material, and even a new species was described from the city (*Xyela nigroabscondita* Haris and Gyurkovics, 2011). The dominant species are: *Dolerus nigratus* (O. F. Müller, 1776), *Dolerus puncticollis* (C. G. Thomson, 1871) and *Athalia rosae* (Linné, 1758). Other common species are: *Arge ochropus* (Gmelin, 1790) and *Macrophyia albicincta* (Schrank, 1776). The 16 rare species are discussed below.

### *Rare species*

*Xyela menelaus* Benson, 1943: (Fig. 1) Known only from Hungary inside the Carpathian Basin: Nagykovácsi, Cinkota (BLANK in VIITASAARI 2002, ROLLER and HARIS 2008). In Cinkota, numerous specimens were captured. We have reliable records from France, Greece, Croatia and Italy only (TAEGER et. al, 2006).

*Xyela nigroabscondita* Haris and Gyurkovics, 2011: Recently described species, known only from Szeged (HARIS and GYURKOVICS 2011). Probably it has a 2 years obligatory diapause, since it can be collected only in every 2 years. Hostplant: *Pinus nigra*.

*Tremex alchymista* Mocsáry, 1886: (Fig. 2). The area of this species is very limited. Known from Hungary, Austria and Romania. Known palces from the Carpathian basin: Budapest, Várpalota, Rezi, Budakeszi, Irsa, Törökparkány (MOCSÁRY 1900, ZOMBORI 1973, MÓCZÁR and ZOMBORI 1973, HARIS 1998).

*Acantholyda flaviceps* (Retzius, 1783): (Fig. 3). New record for Hungary. Known only from a few places of the Carpathian Basin: Tátraszéplak, Szalonca and the Poprádi tó: Menguszfalvi valley from Slovakia (MÓCZÁR and ZOMBORI 1973; Úradník and ROLLER 2000), Nagyenyed Boksánbánya from Transylvania (SZILÁDY 1914, ZILAHÍ KISS 1915).

*Cephalcia arvensis* Panzer, 1804: Rare in Hungary, but sporadic in the Carpathian Basin. Places of collection in Hungary: Sopron (MÓCZÁR and ZOMBORI 1973), Csepel (PASCU 1982), Aggtelek (ZOMBORI 1999), Mátraháza (ROLLER and HARIS 2008). Further localities from the Carpathian Basin: Selmecbánya (PETRICSKÓ 1892), Ótátrafüred, Oravicza (MOCSÁRY 1900), Borosznó, Csorba-tó, Dobsina, Felsőhági, Körmöcbánya (ZOMBORI 1967), Blatnica, Nagy-Fátra: Selenecká dol. (SIEKELOVÁ 1980), Balázsvágás, Mosóc, Istvánkirályfalva (ROLLER 1999a), Kecskéhát (Úradník and Kulfan, 2002), Szentiván: Jávori-hágó, Fekete Vág, Deménvölgy: Lucska, Királyhegy, (ROLLER et al., 2006), Szalonca, Tátraszéplak, Magas Tátra, Tátralomnic, Újszéplak, Felsőszernye, Oroszlánkö, Bélai Tátra: Hátsó Rézaknák, Magas Tátra: Hátsó Jávor völgy, Kralován: Síp heg (ROLLER and HARIS 2008), Zilah (ZILAHÍ KISS 1915), Retyezát, Cibles hg., Hargitafürd, Borberek, Radnai havasok, Gyulafalva, Torja (ZOMBORI 1967), Duruitoare (Ceahlau) (IONESCU 1974), Oravica, Szilág, Retyezát, Pöltinis, Prejba, Nagyszeben, Bucsecs hg., Todirescu, Moldvahosszúmező, Nagydisznód (SCOBIOLA and ISTRATE 1976, PASCU 1982), Fogaras hgs.: Németmező (ZOMBORI and PASCU 1998), Cibles hg., Radnai havasok, Tartarau, Görgényi havasok, Hargitafürd, Királyfürdő, Retyezát, Torja, Szemenik, Gyulafalva (ZOMBORI 2003), Predeál, Brassópojána (SHINOHARA 1985), Vorohta (OBARSKI 1931), Kárpátalja (BOKOTEY 1961), Ivano-Frankivska region (ERMOLENKO 1966), Mezőhát, Laposmező, Hoverla (ZOMBORI and ERMOLENKO 1999), Tiszabogdány: Brebenyeszkul, Rahó: Alsóláz, Lazescsina, Luhi, Németmokra, Királymező: Latundur heg (SHINOHARA and ZOMBORI 2003), North-East Croatia (PEROVIC and LEINER 1996).

*Cephus infuscatus* (C. G. Thomson, 1871): (Fig. 4) Rare species in the Carpathian Basin, we have only few records from Hungary and Slovakia: Csicsó, Malacka, Súr, Pozsony: Dévény, Kopács sziget, Székelyfalva, Ábrahámhegy, Jósvafő, Inárcs (ROLLER 1999a, 2005, ROLLER and HARIS 2008).

*Cephus runcator* (Konow, 1896): (Fig. 5) Rare. It is restricted to Hungary and North-East Croatia in the Carpathian Basin. Known from Újszentmargita (ZOMBORI 1981), Középrigóc (ZOMBORI 1985b), Bugac (ZOMBORI 1985a), Barbacs, Fehértó, Fertőújlak, Kapuvár, Lébény, Osli, Sopron, Várbalog (ZOMBORI 2002) and Drávadiós (MOCSÁRY 1900).

*Arge beckeri* (Tournier, 1889): (Fig. 6) Very rare in the Carpathian Basin. Known only from Hungary: 2 males from Kalocsa, June 1887; 2 males from Szin, 11 May 1982, one old male from Érd (early 20th century) and 1 male and 1 female from Ercsi, May 1896.

(ROLLER and HARIS 2008). Outside of the Carpathian Basin, it is reported from Italy, Ukraine, Russia, Croatia and Macedonia (TAEGER et. al., 2006).

*Arge frivaldszkyi* (Tischbein, 1852): Known distribution in the Carpathian Basin: Budapest, Budapest: Gellérthegy, Diósd, Facskói hágó, Garamkövesd, Martonvásár, Párkány, Simontornya, Sukoró, Vértes: Gém-hegy (PÁDR 1990, MOCsÁRY 1900, PILlich 1930, ROLLER and HARIS 2008, HARIS 2010). It is known from Albania, Macedonia, Bulgaria, Greece, Romania, Slovakia and Ukraine (ACHTERBERG 2004, TAEGER et. al., 2006).

*Dolerus (Poodolerus) quadrinotatus* (Bíró, 1884): (Fig. 7) Very rare species, known specimens from the Carpathian Basin: Szöllőske: 7 females, 7 April 1885, Simontornya: 1 female, 25 March 1938, Látrány: 1 female, 14 April 2000, Nagyszeben: 1 female, 21 April 1941 and 1 female, 02. April 1945, Tasnád: 1 female, 14 April 1883 Borosjenő: 1 female, 19th c., Németbogsán: 1 female, 19th century, Battonya: Tompapuszta: Ősgyepe: 1 female, 16 April 1998, Sződ: 1 female (early 20th c.) and also known from Peér (ROLLER and HARIS 2008, Roller, 1999b). Outside of the Carpathian Basin, it occurs only in Spain (TAEGER et al. 2006).

*Dolerus (Poodolerus) stygius* Förster, 1860 (syn. *D. megapterus* Cameron, 1881): Widely distributed, rare European species. From the Carpathian Basin, it is known from Nickelsdorf (FRANZ 1982) Rábatamási (HARIS 2002), Felsőtömös, Csálhó Mountains (IONESCU 1974), Horaita (PODOLEANU 1977), Subcarpathia (ERMOLENKO 1975) Dinnyés, Simontornya, Fót, Veresegyháza, Kis-Balaton, Zala part, Szigetbecse, Balatonszentgyörgy, Kassa and Peér (ROLLER and HARIS 2008).

*Athalia rufoscutellata* Mocsáry, 1879: In Hungary, this rare species is known from Budapest (MOCsÁRY 1900), Simontornya (PILlich 1930), Zebegény (MÓCZÁR 1941b), Kőszegi-hgs. (MÓCZÁR 1938), Nagykovácsi (ZOMBORI 1975b), Hárskút, Tihany (ZOMBORI 1979a), Bugac: Nagybugac (ZOMBORI 1985a), Nagyvisnyó (ZOMBORI 1996), Komjáti (ZOMBORI 1999) Kelebia, Jósvafő, Újszentmargita, Máriagyűd, Balatonszéplak: Töreki láp, Nagyvisnyó, Haláp, Komjáti: Alsó hegy, Bátorliget, Bugaci erdő, Nadap (ROLLER and HARIS 2008). Out of our present territory it was captured in Kassa, Pozsony, Pozsony: Dévény Radvány, Óbást: Pogányvár, Kisgömöri, Hubó, Gömör, Kopács-sziget (MÓCZÁR 1941a; JENDEKOVÁ 1988, LUKÁS 1992; ROLLER 1999a, 2005, 2007, ROLLER and HARIS 2008) Nagyszeben: Götzenberg, Koloboca, Brassó: Keresztenyavas, Alman: Medgyes, Prépostfalva, Nagyszeben, Kolibica, Brassó, Tompa, Nagyvárad, Nagyszeben: Götzenberg Pingarati, Beszterce-Naszód, Brassó, Szeben, Görgényi havasok, Nagycsúr: Comana Vlasca, Honcťo, Borosjenő, Déva, Betlen (ZOMBORI 1984, IONESCU 1974, ZOMBORI and PASCU 1998, SCOBIA-PALADE 1981, STROBL 1901, MOCsÁRY 1900, SCOBIA-PALADE 1967, MÜLLER 1920, HARIS and ROLLER 2008), Tökös, Bokroshát (PEROVIC et al., 2006).

*Macrophyia teutona* (Panzer, 1799): Known from: Styria: Weinburg, Trencsén county, Barskisfalud, Csicsó, Pozsonyivánka, Nagyjakabfalva, Pernek, Istvánkirályfalva, Pozsony: Dévény Nat. Res., Kopács sziget, Kőszegi Mts., Nagykovácsi, Gézaháza, Szentgál, Nagyvisnyó, Bongárd, Resicza, Selimbar, Nagyszeben, Subcarpathia, Ómassa, Kóspallag, Simontornya, Nadap, Szalonca. (SCHELD 1987, BRANCSIK 1893, MOCsÁRY 1900, JENDEKOVÁ 1988, LUKAS 1992, ROLLER 1999a, 2005, 2007, MÓCZÁR 1938, ZOMBORI 1975, 1980, 1996, SCOBIA-PALADE 1967, 1978, ERMOLENKO 1960, HARIS 2011).

*Pachynematus moerens* (Förster, 1854): Widely distributed European species but very rare from the Carpathina Basin. From Hungary, we know this species only from Újszentmargita and Örszentmiklós (HARIS 2001), we have further data from Koritnycáfürdő (Gregor and Bata, 1942) and from Magas Csúró (Hohe Rinne) at Keresztenysziget in Transylvania (MÜLLER 1920, ROLLER and HARIS 2008).

*Rhogogaster (Cytisogaster) chambersi* (Benson, 1947): Records from the Carpathian Basin: Pozsony: Dévény, Szentmiklósvölgye: Pap-kő, Lucski: Királyhegy, Kopács-sziget, Harádics, Bükk: Nagyvölgy, Fehértó, Budapest: Sashegy, Szársomlyó, Párkány, Szacsva (LUKAS 1992, ROLLER and HARIS 2008, ROLLER 2004, 2005, 1999a, 2007, ZOMBORI 1974, 2002)

*Rhogogaster (Cytisogaster) genistae* (Benson, 1947): Known from only a few places of the Carpathian Basin: Csicsó, Nagykovácsi, Pécs, Homoródszentpál, Ivó: Ivó-patak and Szászka (ROLLER and HARIS 2008, ROLLER 1996, 1999a, ZOMBORI 1975a).

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